

REMARKS

Claims 2, 6, and 11-15 are pending in this application. Claims 2 and 6 are amended herein. Claims 3, 4, 5, and 10 are canceled herein without prejudice or disclaimer. Claims 11-15 are added herein. Support for the amendments to the claims may be found in the claims as originally filed. Reconsideration is requested based on the foregoing amendment and the following remarks.

Response to Arguments:

The Applicants appreciate the consideration given to their arguments. The Applicants, however, are disappointed to find that their arguments were not persuasive. The Office Action asserts in section 6, in the third full paragraph at page 26, that:

Applicant has amended claims to include "and that also stores a plurality of pieces of change information for changing the plurality of pieces of condition information", however, as disclosed above in the rejection, this limitation is obvious with [0095] of Barnes, where it is shown that "Preferably, the communication module 105 allows for dynamic adjustment of bit rate, protocol, and format to accommodate communications with different types devices and changing network conditions", since in order to format to a change, the change data must be stored in order for a format to take effect.

This is submitted to be incorrect. A format is independent of data stored according to the format. Data can change without changing a format, and a format can change without changing the data stored according to the format. Consequently, no "change data must be stored in order for a format to take effect," contrary to the assertion in the Office Action, and so persons of ordinary skill in the art at the time the invention was made would not have been motivated to modify Barnes as proposed in the Office Action.

Even if "change data" had to be stored in order for a format to take effect, however, data needed to simply change a format still does not amount to "a plurality of pieces of condition information that defines a service area around the provision position of the service determined according to the service availability information" as recited formerly in, for example, claim 2.

The Office Action asserts further in section 6, at the bottom of page 26, continuing at the top of page 27, that:

Applicant has also amended claims to include "the plurality of pieces of condition information is individually changed in accordance with the service availability information based on the plurality of pieces of change information". However, as

shown above in the rejection, Barnes discloses this in [0074], where it is shown that changes in network conditions include changes in network availability (e.g., a new network becoming available).

This is also submitted to be incorrect. Changes in network conditions, even if they included changes in network availability such as a new network becoming available, do not amount to a "plurality of pieces of condition information is individually changed in accordance with the service availability information based on the plurality of pieces of change information" as recited formerly in, for example, claim 2.

Nevertheless, in the interest of compact prosecution only, and not for any reason of patentability, claim 2, for example, has been amended further to recite "a demand amount forecast portion that forecasts, by using a predetermined function, an amount of future demand of the service based on the traffic information obtained by the traffic information obtaining portion," and "an existence decision portion that determines whether or not the current position of the customer indicated in the current position information is included in an acceptance area, the acceptance area being one of the plurality of areas and corresponding to the amount of future demand of the service thus forecasted." Further reconsideration is thus requested.

Claim Rejections - 35 U.S.C. § 103:

Claims 2, 3, 5, 6, and 10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Publication No. 2003/0065805 to Barnes *et al.* (hereinafter "Barnes"). The rejection is traversed to the extent it would apply to the claims as amended. Reconsideration is earnestly solicited.

In the claimed invention, it is possible to accept reservations made by customers within a larger area as an amount of the future demand of the service is estimated to be smaller. This minimizes a reduction in the number of customers. In other words, this maximizes the number of customers that can be served.

Moreover, reservations that were made only by customers who are close to a provision position of the service are accepted if it is forecasted that an amount of the future demand of the service is large. This makes it possible to give priority to customers who can come to the provision position of the service in a short time. This enhances the ability of the provider of the service to keep such customers, and it shortens the amount of time until the customers arrive at the provision position of the service, thus maximizing revenue.

Consequently, according to the claimed invention, the service can be provided more efficiently, increasing the rate of profit. This is due to the ability of the claimed invention to change a reservation acceptance area dynamically.

According to the claimed invention, furthermore, an amount of demand for a service is forecasted based on traffic information around the provision position of the service and around the customer, by using a predetermined function. The traffic information is obtained from an information provider. Consequently, according to the claimed invention, it is possible to forecast an amount of the future demand for a service easily at low-cost, without the use of a large-scale mechanism. The sixth and seventh clauses of claim 2, in particular, recite:

A demand amount forecast portion that forecasts, by using a predetermined function, an amount of future demand of the service based on the traffic information obtained by the traffic information obtaining portion;
An existence decision portion that determines whether or not the current position of the customer indicated in the current position information is included in an acceptance area, the acceptance area being one of the plurality of areas and corresponding to the amount of future demand of the service thus forecasted.

Barnes neither teaches, discloses, nor suggests "a demand amount forecast portion that forecasts, by using a predetermined function, an amount of future demand of the service based on the traffic information obtained by the traffic information obtaining portion," and "an existence decision portion that determines whether or not the current position of the customer indicated in the current position information is included in an acceptance area, the acceptance area being one of the plurality of areas and corresponding to the amount of future demand of the service thus forecasted," as recited in claim 2.

The database in Barnes, rather, only holds data of the available *points* of interest in the given area, not "an amount of future demand of the service," as recited in claim 2. In particular, as described at paragraph [0162]:

Determining the closest point of interest in the preferred embodiment is accomplished by retrieving data of the available points of interest in the given area from a database at step 305.

Barnes, moreover, determines the distance *to* the available points of interests meeting the criteria and selects the available point of interest meeting the criteria with the smallest distance, instead of a forecasting "an amount of future demand of the service," as recited in claim 2. In particular, as described at paragraph [0164]:

After the available points of interests meeting the criteria are determined, the

closest point of interest meeting the selection criteria is determined at step 310. This step preferably includes determining the distance (e.g., by traveling the streets and thoroughfares) to the available points of interests meeting the criteria and selecting the available point of interest meeting the criteria with the smallest distance.

Barnes, finally, stores data based on the location of the *user*, instead of forecasting "an amount of future demand of the service," as recited in claim 2. In particular, as described at paragraph [0141]:

Thus, where the data management module 120 stores the data is also dependent on data storage rules that may include user or manufactured stored rules based on data type, the location of the user, the direction the user is going, anticipation that the user will be at location at a later time (e.g., that the user will be out of transmission range a few minutes hence), recent activities of the user, an external event (e.g., turning off the automobile engine), the intended destination of the user, the source of the data, the time of day, the day of the week, the purpose of the data, and/or other factors.

The last clause of claim 2 recites:

A reservation acceptance processing portion that accepts a reservation of the service for the customer who sent the request information if the existence decision portion determines that the current position of the customer is included in the acceptance area, and does not accept the reservation of the service for the customer unless the current position of the customer is included in the acceptance area.

Barnes neither teaches, discloses, nor suggests "a reservation acceptance processing portion that accepts a reservation of the service for the customer who sent the request information if the existence decision portion determines that the current position of the customer is included in the acceptance area, and does not accept the reservation of the service for the customer unless the current position of the customer is included in the acceptance area," as recited in claim 2. In Barnes, rather, the user already *has* a reservation with a hotel. The device 101 in Barnes checks the user, who already *has* a reservation, into a hotel if the user is within the predetermined distance of the hotel, instead of accepting "a reservation of the service for the customer, at the provision position, when the existence decision portion has determined that the customer is within the service area," as recited in claim 2. In particular, as described at paragraph [0196]:

Alternately, the user may already have a reservation with a hotel in which case the user preferably has previously input the destination to the device 101 and when the user (and device 101) is within the predetermined distance of the destination hotel, the device 101 automatically (or after prompting the user for permission to

check in) checks the user into the hotel as described below.

Barnes, moreover, receives user *input* about a target point of interest, as noted in the Office Action at the top of page 3, instead of accepting "a reservation of the service for the customer," as recited in claim 2. In particular, as described at paragraph [0155]:

Steps for performing this example application are shown in FIG. 4 and include determining a target point of interest (PI) at step 301, determining the available PIs at step 305, determining the closest PI at step 310. In this example, the application also optionally includes the steps of receiving a user input at step 315, communicating with the PI (e.g., based on the user input) at step 320, and informing the user of the results of the communication at step 325.

The device 101 of Barnes, moreover, enters into a commercial exchange on *behalf* of the user to purchase a product, instead of instead of accepting "a reservation of the service for the customer," as recited in claim 2. In particular, as described at paragraph [0156]:

In addition, after determining the point of interest (in any of the applications), the device 101 can optionally enter into a commercial exchange on behalf of the user, for example, to purchase a product (e.g., step 320).

Finally, the user can instruct the device 101 to *transmit* a request for other vendor information, instead of instead of accepting "a reservation of the service for the customer," as recited in claim 2.. In particular, as described at paragraph [0277]:

The user can also instruct the device 101 (e.g. by a voice input) to transmit a request for other vender information from a remote computer system (which may or may not be the vender computer system), prior to arriving at a vender location.

The fourth clause of claim 2 recites:

A current position information obtaining portion that obtains current position information indicating a current position of the customer who sent the request information.

Barnes neither teaches, discloses, nor suggests obtaining "a current position information obtaining portion that obtains current position information indicating a current position of the customer who sent the request information," as recited in claim 2. Barnes, rather, monitors the location of the user carrying the device in order to *notify* the user of being in a location that the *user* should not enter, not "a current position of the customer who sent the request," as recited in claim 2. In particular, as described at paragraph [0316]:

In addition, the device 101 may be programmed to monitor the location of the user carrying the device, which may include what facilities the user enters, the

address(es) visited, what vendors the user visits, etc. The location may then be periodically transmitted to a remote computer system or a location notification can be transmitted to a remote destination if the user enters a restricted location (a location defined by the authorized user as being a location that the user should not enter and/or a notification transmitted).

The user information supplied in Barnes, moreover, is *demographic* data, not "a current position of the customer who sent the request information," as recited in claim 2. In particular, as described at paragraph [0212]:

In addition, the ECCS transmits a request and, in response, receives user information from devices carried by persons entering the facility, area, or event. The requested and supplied user information may include demographical data or any other desirable information.

Claim 2 is thus submitted to be allowable. Withdrawal of the rejection of claim 2 is earnestly solicited.

Claim 6:

The fourth clause of claim 6 recites:

A current position information obtaining portion that obtains current position information indicating a current position of a customer who made the request.

Barnes neither teaches, discloses, nor suggests "a current position information obtaining portion that obtains current position information indicating a current position of a customer who made the request," as discussed above with respect to the rejection of claim 2.

The sixth and seventh clauses of claim 6 recite:

A demand forecast unit that forecasts, by using a predetermined function, an amount of future demand of the parking lot based on the traffic information obtained by the traffic information obtaining portion.

An existence decision portion that determines whether or not the current position of the customer indicated in the current position information is included in an acceptance area, the acceptance area being one of the plurality of areas and corresponding to the amount of future demand of the parking lot thus forecasted.

Barnes neither teaches, discloses, nor suggests "a demand forecast unit that forecasts, by using a predetermined function, an amount of future demand of the parking lot based on the traffic information obtained by the traffic information obtaining portion," and "an existence decision portion that determines whether or not the current position of the customer indicated in the current position information is included in an acceptance area, the acceptance area being one of the plurality of areas and corresponding to the amount of future demand of the parking lot

thus forecasted," as discussed above with respect to the rejection of claim 2.

The eighth clause of claim 6 recites:

A reservation acceptance processing portion that accepts a reservation of the parking lot for the customer who made the request if the existence decision portion determines that the current position of the customer is included in the acceptance area and does not perform the reservation unless the existence decision portion determines that the current position of the customer is included in the acceptance area.

Barnes neither teaches, discloses, nor suggests "a reservation acceptance processing portion that accepts a reservation of the parking lot for the customer who made the request if the existence decision portion determines that the current position of the customer is included in the acceptance area and does not perform the reservation unless the existence decision portion determines that the current position of the customer is included in the acceptance area," as discussed above with respect to the rejection of claim 2. Claim 6 is thus submitted to be allowable, for at least those reasons discussed above with respect to the rejection of claim 2. Withdrawal of the rejection of claim 6 is earnestly solicited.

New Claims:

Claims 11 and 12 depend from claim 2 and add further distinguishing elements. Claims 11 and 12 are thus also believed to be allowable.

Claim 13:

According to claim 13, a larger reservation acceptance area may be applied to a customer who is to use a parking lot for a longer period of time, in order to keep the customer. This increases sales efficiently. Claim 13 can change a reservation acceptance area dynamically. The second clause of claim 13, for example, recites:

An area information storage portion that stores, therein, area information that defines a plurality of areas having different sizes around the parking lot, each of the plurality of areas corresponding to time and having a larger size as the time is shorter.

None of the cited references teaches, discloses, or suggests "an area information storage portion that stores, therein, area information that defines a plurality of areas having different sizes around the parking lot, each of the plurality of areas corresponding to time and having a larger size as the time is shorter," as recited in claim 13. Claim 13 is thus believed to be allowable.

Claims 14 and 15:

Claims 14 and 15 depend from claim 6 and add further distinguishing elements. Claims 14 and 15 are thus also submitted to be allowable.

Claim 16:

The third clause of claim 16 recites:

A current position information obtaining step of obtaining current position information indicating a current position of the customer who sent the request information.

None of the cited references teaches, discloses, or suggests "a current position information obtaining step of obtaining current position information indicating a current position of the customer who sent the request information," as discussed above with respect to the rejection of claim 2.

The fifth and sixth clauses of claim 16 recite:

A demand amount forecast step of forecasting, by using a predetermined function, an amount of future demand of the service based on the obtained traffic information;
An existence decision step of determining whether or not the current position of the customer indicated in the current position information is included in an acceptance area, the acceptance area being one of the plurality of areas and corresponding to the amount of future demand of the service thus forecasted.

None of the cited references teaches, discloses, or suggests "a demand amount forecast step of forecasting, by using a predetermined function, an amount of future demand of the service based on the obtained traffic information," and "an existence decision step of determining whether or not the current position of the customer indicated in the current position information is included in an acceptance area, the acceptance area being one of the plurality of areas and corresponding to the amount of future demand of the service thus forecasted," as discussed above with respect to the rejection of claim 2.

The seventh clause of claim 16 recites:

A reservation acceptance processing step of accepting a reservation of the service for the customer who sent the request information if it is determined in the existence decision step that the current position of the customer is included in the acceptance area, and not accepting the reservation of the service for the customer unless it is determined in the existence decision step that the current position of the customer is included in the acceptance area.

None of the cited references teaches, discloses, or suggests "a reservation acceptance

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processing step of accepting a reservation of the service for the customer who sent the request information if it is determined in the existence decision step that the current position of the customer is included in the acceptance area, and not accepting the reservation of the service for the customer unless it is determined in the existence decision step that the current position of the customer is included in the acceptance area," as discussed above with respect to the rejection of claim 2. Claim 16 is thus believed to be allowable.

Conclusion:

Accordingly, in view of the reasons given above, it is submitted that all of claims 2, 6, and 11-15 are allowable over the cited references. Allowance of all claims 2, 6, and 11-15 and of this entire application is therefore respectfully requested.

Finally, if there are any formal matters remaining after this response, the Examiner is invited to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge them to our Deposit Account No. 19-3935.

Respectfully submitted,

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